

Exhibit 1

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20 at the customary/agreed-upon rate; (2) Not to furnish
21 this transcript, either in whole or in part, on disk or
22 hard copy, via modem or computer, or by any other means,

12 Q. Of the 22 courses that you took in
13 electricity and electrical systems, what -- can you
14 quantity in any way, shape, or form the amount of time or
15 material that was taught relating specifically to
16 lithium-ion batteries?

17 A. I don't keep a record of that.

18 Q. Do you keep record whether it's materials,
19 PDF handout, or otherwise of the 22 courses involving
20 electrical systems you've taken?

21 A. I don't recall that. I didn't prepare
22 that for my deposition today. I mean, I'm certain that I
23 save a lot of file materials that I have into a job
24 folder that I have at work that includes articles that
25 I've reviewed, codes, treatises that I use. All of

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1 that's in there that I've reviewed over the course of
2 24 years.

3 Q. Okay. When was the last course that you
4 took relating to electrical systems on this 1033 matrix?

5 A. So it would have been the fire
6 investigation master class. We certainly discussed it at
7 that time. And that was in 2024, this year. I think it

8 was March of 2024.

9 Q. And are those online courses, sir?

10 A. No, this particular one was in person.

11 Q. Where was that?

12 A. At IRIS Fire Investigations.

13 Q. Who puts on those courses in electrical
14 systems?

15 A. I believe it was Bob Toth had spoke. And
16 then I may butcher his name. Dave Icove, I believe.

17 Q. Just judging by your CV, you are not a
18 mechanical engineer, correct?

19 A. No.

20 Q. You're not an electrical engineer, correct?

21 A. No.

22 Q. Aside from the continuing education
23 or courses relating to electrical systems, you don't have
24 any other specialized training in lithium-ion battery
25 failures?

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1 MR. GIROUX: Form.

2 THE DEPONENT: I certainly have training
3 in lithium-ion battery fires. I've also had many

4 discussions about this with other experts, electrical
5 experts, and certainly we've -- I've been involved in
6 cases where a battery-operated appliance, whatever you
7 want to call it, appliance item, toy, a piece of
8 equipment, that have all had lithium-ion batteries. So a
9 hover board to me is -- is electrical components that are
10 powered by battery that are consistent with other, again,
11 appliances or equipment that are battery operated.

12 Q. Aside from investigating those types of
13 fires and incidents, do you have any specialized education
14 in the cause of lithium-ion battery failures?

15 A. I would say that there's some education in
16 those, continuing education courses, but that also
17 exceeds my expertise, and I would basically ask for an
18 additional consultant to review the hover board and
19 whether it was the cause of the fire.

20 Q. Understood. And that's what I was getting
21 at. At least with regards to this case, you understand
22 that counsel that has retained you on behalf of the
23 defendants, Jetson and Walmart, they have retained other
24 experts in various fields, one of which includes a battery
25 expert to analyze potential failures in the lithium-ion

18 Q. You mentioned in your CV that your
19 consulting experience includes evaluation of commercial
20 kitchen cooking equipment, fire suppression system,
21 exhaust, duct and fan, and code-required inspections and
22 cleaning services. You also mentioned automobile, heavy
23 equipment, oil and gas, industry inspections or
24 investigations. Quantify for me the work that you do
25 relating to fire investigations involving e-mobility

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1 devices.

2 A. Again, I don't keep record of that. I
3 couldn't tell you a percentage of how many fires I've
4 done that involve mobility devices that are battery
5 operate the.

6 Q. How many hover board fires have you
7 investigated?

8 A. Hover boards. I would say two.

9 Q. Including this one?

10 A. Correct.

11 Q. Okay. When was the last one prior to this
12 one?

13 A. It was in Colorado. I would say maybe

13 opinion.

14 Q. When you say "we examined the circuit," "we
15 identified," "we looked visually at the interior for
16 evidence of arcing," "we" -- are you walking through and
17 doing all of that side by side with Mr. Strandjord?

18 A. No, there's times where we're separated.
19 And in this particular case it was decided upon all the
20 participants and the experts in order to process the
21 scene a little bit more efficiently, we separated in two
22 groups initially. So initially there was a group that
23 was working at the exterior of the structure. That
24 included myself on our side. And then Mr. Strandjord was
25 working inside the bedroom. And then once kind of the

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1 debris removal was completed and we're just kind of in
2 the documentation phase of our work, we certainly would
3 have been together and we were looking for additional
4 evidence of arcing. If there was anything that I would
5 have seen that was either what I thought was arcing or
6 could be arcing or anything like that, I would have
7 addressed that with Mr. Strandjord.

8 Q. And so if I understood your testimony, when

9 you and Mr. Strandjord would come together that would have
10 been during the documentation phase?

11 A. Yeah, I would say -- it was after we
12 finished the -- or the debris removal and reconstruction
13 of the shed. They were working inside. And then -- and
14 eventually it kind of became -- you know, we were kind of
15 walking together through the house, examining circuits,
16 examining the circuit breaker. I mean, I remember being
17 at the circuit panel with Mr. Strandjord. So, yeah,
18 there's a point in time during that inspection where
19 we're together and walking through and talking about this
20 and discussing it.

21 Q. Do you hold yourself out as an expert in
22 arc mapping?

23 A. Not arc mapping.

24 Q. Do you defer to Mr. Strandjord with regards
25 to any opinions in the field of arc mapping, correct?

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1 MR. GIROUX: Form.

2 THE DEPONENT: Correct. I think he's a
3 little bit more knowledgeable than I am. Certainly I've
4 conducted arc mapping analysis myself and arc mapping on

5 simple sites. But in this particular case,
6 Mr. Strandjord was involved, so I relied upon
7 Mr. Strandjord for parts of that.

8 Q. (By Mr. Ayala) You say parts of it. What
9 parts did you not rely on him for as it relates to the arc
10 mapping?

11 A. I would say -- well, I'm talking about arc
12 mapping analysis. That's what I did not rely upon.
13 Mr. Strandjord totally -- we did discuss. He provided
14 feedback and I provided feedback.

15 Q. Okay. Did you make any changes to his
16 ultimate conclusion as expressed to you which he compiled
17 and rendered for arc mapping?

18 A. Can you repeat the question?

19 Q. Yes, sir.

20 Did you make any changes to his ultimate
21 conclusions as it relates to arc mapping?

22 A. No, I did not.

23 Q. Given the fact that you and Mr. Strandjord
24 were separated for at least portions of this scene
25 investigation or inspection, are you familiar with every

18 you conducted to verify the reliability or accuracy of the
19 arc mapping and you've given me at least a portion of your
20 opinions and analysis as to the application of the
21 mark -- of the arc mapping. But what I'm really asking
22 you is what testing -- other than thought, what testing
23 did you do to verify the arc mappings for reliability or
24 accuracy?

25 A. Yeah, I don't know that that's accurate.

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1 And maybe we should get the court reporter to read that
2 back, because I think the original question was State
3 everything that I did to -- or what testing I did to
4 determine that. And that's what I'm -- that's what I
5 discussed in the beginning was those are the thought
6 experience -- thought experiments that I use to apply the
7 arc mapping analysis to the fire dynamics and the fire
8 patterns and render an opinion as to how and when that
9 arcing occurred.

10 Q. So clearly we're having a little bit of a
11 miscommunication, and that's my fault. I'll take
12 ownership of that. I'm not asking you how you applied the
13 arc mapping to ultimately analyze and render the opinions

14 you did as to origin of the fire. What I'm asking you is
15 what did you do by way of testing to verify the arc
16 mapping's accuracy and reliability. That's what I'm
17 asking you.

18 MR. GIROUX: Objection. Asked and
19 answered.

20 A. Absolutely. I think I've discussed this
21 in this case and other questions as well. Everything
22 that I've done to complete my arc mapping analysis in
23 this case. And that included everything that I've
24 discussed to this point.

25 Q. (By Mr. Ayala) Well, the fire patterns and

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1 fire dynamic analysis conducted by Dr. Gorbett, did you
2 rely on him for those?

3 A. I relied on Mr. Gorbett for the fire
4 testing and fire modeling.

5 Q. That included the burn of the exemplar
6 shed?

7 A. Correct.

8 Q. That included any and all calculations
9 relating to its fire modeling?

10 A. I'm not going to repeat his calculations.

11 Q. I didn't ask you to, sir. Just asking as
12 to your reliance. You relied on all of his calculations
13 that included and encompassed his fire modeling opinions?

14 A. I relied on his summary of his fire models
15 that he produced. I had conversations with Dr. Gorbett.
16 I've read his report. I've reviewed his methodology
17 within his report. I've reviewed the data in his report,
18 and nothing suggests to me, nor have I ever been offered
19 any evidence as to why that model was unreliable.
20 Everything to me was are suggestive that that fire model
21 that Mr. Gorbett produced was reliable in this case.

22 Q. Did you review any of the data that -- that
23 he used and annualized and calculated for purposes of
24 ultimately rendering his fire modeling opinions?

25 A. Again, what was in his report and what we

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1 discussed, again, there was nothing that I saw that was
2 incorrect.

3 Q. I appreciate that, sir. But what's the
4 answer to my question?

5 A. Okay. Could you repeat the question?

6 Q. Yeah.

7 Did you review any of the data that he
8 used, the calculations that he made to ultimately render
9 his fire modeling opinions that were summarized in his
10 report?

11 A. I reviewed -- well, we reviewed on -- on a
12 conference call -- a Zoom conference call several of the
13 videos of burn testing, and we ran a couple of fire --
14 several of the models as well. I did not review the
15 actual calculations.

16 Q. Again, that's just something you're relying
17 on Dr. Gorbett in terms of its accuracy, correct?

18 A. Correct.

19 Q. So you relied on him for those two
20 components, the fire testing and fire modeling. You
21 relied on Mr. Strandjord for the arc mapping. Did you
22 rely on Mr. Sudler for anything related to your ultimate
23 opinions?

24 A. No, because I don't have an opinion that
25 the fire originated at the hover board.

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1 Q. Okay. Did you do any -- any examination of

2 the hover board components related to your -- the scope of
3 your work in this case?

4 A. I reviewed and inspected the hover board
5 from an aspect of fire patterns.

6 Q. As we discussed earlier, obviously when it
7 comes to potential failure of the lithium-ion battery of
8 the subject hover board, that's something you defer to
9 Mr. Sudler and any other expert qualified?

10 A. Correct.

11 Q. As you go about your forensic investigation
12 specifically relating to this case, do you follow
13 NFPA 921?

14 A. Yes, I do.

15 Q. Do you believe that NFPA 921 is
16 authoritative and required for purposes of fire
17 investigations?

18 A. Yes, I do.

19 Q. Given your reliance on NFPA 921, you
20 understand that it requires analysis -- complete analysis
21 of all available evidence?

22 A. Yes.

23 Q. Do you believe that occurred at least with
24 regards to your involvement in this case, correct?

25 A. Absolutely, yes.

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1 Q. And you agree -- or believe that it
2 occurred with regards to Mr. Strandjord and Dr. Gorbett's
3 analysis and opinions in this case which you relied on?

4 A. Those are two components that I relied
5 upon -- or excuse me -- three components that I relied
6 upon.

7 Q. Okay. And so given your reliance on that,
8 you believe that they would have complied with NFPA 921 as
9 to complete analysis of all available evidence as well?

10 A. Correct.

11 Q. If they did not comply with NFPA 921 by
12 failing to review or analyze all available evidence, does
13 that render their opinions unreliable?

14 MR. GIROUX: Form.

15 THE DEPONENT: If at any point in time I
16 thought Mr. Strandjord's or Mr. Gorbett's opinions in
17 this case were unreliable, I would have not used them in
18 this case to conclude the origin and cause of my fire.

19 Q. (By Mr. Ayala) I appreciate that, sir, but
20 that wasn't exactly my question.

21 Do you agree that failing to conduct a
22 complete analysis of all available evidence in this fire

23 investigation is a failure to comply with NFPA 921?

24 A. Yes.

25 Q. And if either Dr. Gorbett or Mr. Strandjord

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1 failed to conduct a complete analysis of all available
2 evidence within their field of specialty, if you will,
3 then that would amount to a failure to comply with
4 NFPA 291?

5 MR. GIROUX: Form.

6 THE DEPONENT: Correct.

7 Q. (By Mr. Ayala) And if that occurred in
8 this hypothetical, then their failure to conduct a
9 complete analysis of all available evidence would render
10 their ultimate opinion unreliable at least pursuant to
11 NFPA 291?

12 MR. GIROUX: Form.

13 THE DEPONENT: Correct.

14 Q. (By Mr. Ayala) You have expressed in your
15 report, sir, some criticism of Detective Sheaman related
16 to his origin and cause investigation, correct?

17 A. Correct.

18 Q. What are your criticisms of his fire

19 investigation related to this Wadsworth case?

20 A. Certainly I can refer to my report to go
21 over everything, but if you don't want me to waste that
22 time, I can certainly just come up with a few particular
23 topics that I disagree with.

24 Q. Yeah, it's up to you, sir. Whatever mode
25 is complete for you. But I would assume that you've lived

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1 with this case for a while so you're probably aware of
2 what your criticism are of those individuals, including
3 Sheaman.

4 A. Correct.

5 I think some of the biggest topic -- I
6 think to start with would be interpretation of fire
7 patterns. I completely disagree with Mr. Sheaman that a
8 V pattern -- or the visual characteristics of a V pattern
9 are displayed on the west interior wall and continue on
10 the south interior wall of bedroom number 4. I certainly
11 disagree with his assessment that the V pattern is
12 somehow related to this fire. I certainly think also
13 that his opinion in his deposition that this V pattern
14 connected to a protected pattern is somehow the origin of

14 for -- could you repeat the question?

15 Q. (By Mr. Ayala) Sure. And let me -- let me
16 make it a little bit easier.

17 A. Sure.

18 Q. In conclusion number 2, you rely upon an
19 assumption that Mrs. Wadsworth improperly discarded a
20 cigarette which ignited the combustible materials and
21 thereby the shed, correct?

22 A. Again, I think I disagree with the word
23 "assumption." There were no assumptions made. And I'd
24 certainly -- I think you had previously used the word
25 "leap." So what I did in this case was I determined the

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1 origin of this fire, then I identified the potential
2 ignition sources within this fire. I identified the
3 materials that were located in the shed that would have
4 been adjacent to any of these potential ignition sources.
5 I evaluated those ignition sources. I evaluated the
6 materials that were in that room. I evaluated the
7 potential ignition sequence of that fire. And my final
8 selection of hypothesis was that the probable cause of
9 this fire was from ignition of the smoldering coal that

10 ignited adjacent combustible materials.

11 Q. Where specifically was Mrs. Wadsworth
12 smoking that cigarette approximately two hours before the
13 fire within that shed?

14 A. I was told it was within that shed, and I
15 believe that they had reported that the -- there was a
16 chair on the -- that would be the north side of the shed.
17 There was a table. That's where the ashtrays were. Then
18 there was an additional chair I believe at the -- that
19 would be the south end. I don't recall exactly where she
20 was sitting when she smoked the cigarette.

21 Q. Okay. You would agree with me there's
22 no -- there's no evidence in the case as to where she was
23 specifically sitting?

24 A. Not specifically sitting, no.

25 Q. Or if she was standing?

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1 A. No.

2 Q. You would agree with me that there's no
3 evidence in this case for how long she was smoking this
4 cigarette approximately two hours before the fire?

5 A. I don't think that was discussed of how

6 long she was puffing on the cigarette inside the shed,
7 the time she was last at the shed.

8 Q. You would agree with me there's no evidence
9 as to how much was left of anything of the cigarette that
10 he was smoking approximately two hours before the fire?

11 MR. GIROUX: Form.

12 THE DEPONENT: Correct. I think that
13 would have been consumed by this fire.

14 Q. (By Mr. Ayala) You would agree with me
15 there's no evidence as to which ashtray, if any, she
16 placed the cigarette prior to exiting the shed?

17 MR. GIROUX: Form.

18 THE DEPONENT: Correct. I think there was
19 testimony that there was an ashtray that we found that
20 was consistent with Mr. Wadsworth and Stephanie's
21 description of the ashtray. And there was this -- I
22 don't know if you would call it like a small
23 skillet -- kind of like a cast iron skillet. But it
24 didn't have very, like, high sides or anything
25 [indicating]. They were using that. And then there was



1 also some discussion of a bucket of cigarettes or a

2 cigarette -- or excuse me -- a bucket that contained
3 cigarettes.

4 Q. Regardless, there's no evidence as to which
5 of those three Mrs. Wadsworth used to put out her
6 cigarette before exiting the shed, correct?

7 MR. GIROUX: Form.

8 THE DEPONENT: Correct. Correct.

9 Q. (By Mr. Ayala) There's no evidence to
10 suggest that she didn't attempt to put out her cigarette
11 before exiting the shed, correct?

12 MR. GIROUX: Form.

13 THE DEPONENT: There would be no physical
14 evidence left after that fire.

15 Q. (By Mr. Ayala) And by way of even
16 testimony, there's no evidence to suggest that she never
17 attempted to put out that cigarette, correct?

18 A. I would have to go back and review the
19 deposition, but I don't -- I don't think I can review
20 today that she said specifically whether I extinguished
21 the cigarette or exactly how she extinguished the
22 cigarette. I think there was testimony that she just,
23 you know, discarded the cigarette in the ashtray -- one
24 of the ashtrays.

25 Q. Have you done -- related to this case, have

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1 you done any type of testing as to this smoldering
2 analysis of the cigarette?

3 A. I conducted thought experiments in
4 compliance with an NFPA 921. And I'm sorry. Can you
5 repeat the question again?

6 Q. Yeah. Have you done any testing to verify
7 the smoldering analysis of a cigarette?

8 A. I have not conducted any physical tests on
9 testing whether a cigarette can ignite adjacent
10 combustible materials.

11 Q. Ever, correct?

12 A. In this case or other cases?

13 Q. In any other case. I understand your
14 testimony as to this case. But I'm asking now have you
15 ever done such an analysis through testing.

16 A. I can recall a few cases where either I
17 did that testing or I reviewed that testing. And
18 certainly I would review -- have reviewed numerous
19 articles and textbooks about cigarette ignition.

20 Q. Okay. And I'm specifically talking about
21 you. Have you conducted any such testing?

22 A. No.

23 Q. Have you reviewed any testing performed by
24 Dr. Gorbett, Mr. Sudler, Mr. Stranjord relating to the
25 smoldering analysis of a cigarette in this case?

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1 A. I don't recall, no.

2 Q. In fact, you're aware that none of them
3 conducted such a -- such testing, correct?

4 A. Correct.

5 Q. Did you do any testing relating to the
6 combustible materials within the shed on the date of
7 incident?

8 A. No testing.

9 Q. And by the way, when you -- you've
10 mentioned it a couple of times. Thought experiments. Are
11 you basically telling this jury you're thinking and
12 analyzing the data or the evidence?

13 A. Yes, that's what I think a fire
14 investigator does throughout his entire investigation.

15 Q. I'm just trying to understand your
16 terminology of thought experiments. You're thinking about
17 it?

18 A. Yeah, the thought experiments are located

19 within that NFPA 921. And it discusses using thought
20 experiments to test our hypothesis, and that's what I was
21 doing in this case. And that's what I did throughout
22 this entire case on every hypothesis that I had.

23 Q. Okay. Do you -- is one of your opinions
24 that Mr. Schulz did not conduct thought experiments?

25 A. No, I think Mr. Sheaman conducted you

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1 thought experiments. I think his analysis at -- the
2 interpretation of fire patterns, among everything, is
3 incorrect.

4 Q. Okay. And I'm sorry. I said Schulz. You
5 said Sheaman. Let me just clarify my question. It's
6 okay.

7 A. Sorry.

8 Q. Just hearing your -- your testimony, you
9 you believe Detective Sheaman conducted you thought
10 experiments, but you certainly disagree with the
11 conclusions of those thought experiments; is that fair?

12 A. Correct.

13 Q. Okay. Same question as to Mr. Schulz. You
14 believe that he conducted thought experiments, but you

12 that occurred on the power cord for the space heater and
13 the extension cord that were in the shed. Certainly
14 those are possible ignition sources that I evaluated in
15 determining the -- or the cause of this fire.

16 Q. Did you ultimately rule out those two
17 possibilities, the power cord and the space heater?

18 A. Certainly not completely. They are
19 possibilities. And in 921 we have basically two levels
20 of probability, possible and probable. Probable being
21 greater than 50 percent; possible being less than
22 50 percent. So the way I reported it in my case was the
23 probable cause of the fire was the ignition from a
24 cigarette. And that I evaluated those two other
25 potential ignition sources and didn't think that they

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1 were viable ignition sources in this case and with the
2 materials present.

3 Q. Okay. And so the only -- to use your term,
4 the only viable ignition source in this case, based on
5 your review and analysis, is the smoldering cigarette?

6 A. Not the viable, but the probable.

7 Q. Okay. Did you ever reach an opinion as to

8 whether or not Mrs. Wadsworth attempted to put out the
9 cigarette?

10 A. No. I have statements that she smoked
11 outside, and that's the evidence that I was using to
12 indicate that there was smoking in the shed that occurred
13 two hours prior.

14 Q. Would it be relevant to your analysis to
15 know that she attempted to put out the cigarette?

16 MR. GIROUX: Form.

17 THE DEPONENT: I think in the 24 years
18 that I've been doing this everyone has said that they put
19 out the -- the cigarette properly, and that it was
20 100 percent extinguished. And I would say that the
21 majority of people that I interview don't typically admit
22 to not putting out the cigarette correctly before, you
23 know, placing it into combustibles or adjacent
24 combustibles and so forth. So what I do is I take that
25 statement and apply it to the potential ignition sources

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1 in this room. I know that she was smoking in that shed.
2 And that's what I applied to my -- to my opinions.

3 Q. (By Mr. Ayala) I appreciate that, sir.

4 But my only question was, would it be relevant for you to
5 know whether or not she attempted to put it out?

6 MR. GIROUX: Form.

7 THE DEPONENT: Not necessarily.

8 Q. (By Mr. Ayala) Would it be relevant for
9 you to know for purposes of your analysis how much of the
10 cigarette was left?

11 A. No. As long as there's a coal still left
12 on it, then it's a potential ignition source.

13 Q. Would it be relevant for you to know the
14 rate at which the cigarette was burning after she left the
15 shed?

16 MR. GIROUX: Form.

17 THE DEPONENT: I don't think that's
18 required to come to the conclusion that the probable
19 cause of this fire was from cigarette ignition.

20 Q. (By Mr. Ayala) How many cases prior to
21 this one have you concluded that -- along the lines of
22 this smoldering cigarette analysis that an improperly
23 discarded cigarette was the cause of a fire?

24 A. I couldn't even begin to count. There's
25 been a lot.